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NOTICE OF ALLOWANCE AND FEE(S) DUE

67706

7590

09/30/2008

06/25/2001

ORGANON USA, INC. c/o Schering-Plough Corporation 2000 Galloping Hill Road Mail Stop: K-6-1, 1990 Kenilworth, NJ 07033

EXAMINER CLAYTOR, DEIRDRE RENEE ART UNIT PAPER NUMBER

9900

1617

DATE MAILED: 09/30/2008

1998.414US

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.

09/831,954 Hubert Jan Jozef Loozen

TITLE OF INVENTION: ESTROGENIC ESTRA-1,3,5(10)-TRIENES WITH DIFFERENTIAL EFFECTS ON THE ALPHA AND BETA ESTROGEN RECEPTORS, HAVING A LINEAR HYDROCARBON CHAIN OF FROM 5-9 CARBON ATOMS IN POSITION 11

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$0	\$0	\$1440	12/30/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current **SMALL ENTITY status:**

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

appropriate. All further correspondence including the Patent, advance orders and notification indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new emaintenance fee notifications. CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				on of maintenance fees will be mailed to the current correspondence address as a correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must			
67706	7590 09/30	1/2008	ha	ve its own certificat	e of ma	iling or transmission.	it of former drawing, must
ORGANON USA, INC. c/o Schering-Plough Corporation 2000 Galloping Hill Road				Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.			
Mail Stop: K-6- Kenilworth, NJ							(Depositor's name)
Remiworth, 13	07033						(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	R	ATTC	ORNEY DOCKET NO.	CONFIRMATION NO.
09/831,954	06/25/2001	•	Hubert Jan Jozef Looze	n		1998.414US	9900
		ARBON CHAIN OF FRO	WITH DIFFERENTIAL)M 5-9 CARBON ATOM	AS IN POSITION 1	1	PHA AND BETA EST	FROGEN
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	JE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$0	\$0		\$1440	12/30/2008
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
CLAYTOR, DE	EIRDRE RENEE	1617	514-178000				
CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON PLEASE NOTE: Unless an assignee is identified below, no assignee.			(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. THE PATENT (print or type)				
recordation as set fort (A) NAME OF ASSI	h in 37 CFR 3.11. Comj GNEE	pletion of this form is NO	T a substitute for filing at (B) RESIDENCE: (CIT	n assignment. Y and STATE OR	COUNT	TRY)	oup entity 🖵 Government
4a. The following fee(s)	are submitted:	41	b. Payment of Fee(s): (Plo	ease first reapply a	ny prev	viously paid issue fee :	shown above)
Issue Fee			A check is enclosed.				
☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta	tus (from status indicate as SMALL ENTITY state	· · · · · · · · · · · · · · · · · · ·	☐ b. Applicant is no lo	nger claiming SMA	LL EN	TITY status. See 37 CI	FR 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte ites Patent and Trademark	d from anyone other than Office.	the applicant; a reg	gistered	attorney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name				-			
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 dapplication form to the ions for reducing this bu /irginia 22313-1450. DC	CFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or 1.14. This collection is e 7 depending upon the ind 1. de Chief Information Offic COMPLETED FORMS	retain a benefit by stimated to take 12 ividual case. Any c cer, U.S. Patent and TO THIS ADDRES	the pub minute: ommen I Trader S. SEN	lic which is to file (and s to complete, includin ts on the amount of tir mark Office, U.S. Depa D TO: Commissioner	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

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67706 75	90 09/30/2008		EXAM	INER
ORGANON USA, INC.			CLAYTOR, DEIRDRE RENEE	
c/o Schering-Plough Corporation			ART UNIT	PAPER NUMBER
2000 Galloping Hi	ll Road		1617	
Mail Stop: K-6-1, 1990			DATE MAILED: 09/30/2008	
Kenilworth, NJ 070			DATE MAILED: 09/30/200	o

Determination of Patent Term Extension under 35 U.S.C. 154 (b)

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	09/831,954	LOOZEN ET AL.	
Notice of Allowability	Examiner	Art Unit	
	Renee Claytor	1617	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIP of the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to arguments filed on 8/	(OR REMAINS) CLOSED or other appropriate comm GHTS. This application is and MPEP 1308.	in this application. If not included nunication will be mailed in due cours	
2. ☑ The allowed claim(s) is/are <u>1,7,8 and 13</u> .			
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). 	been received. been received in Applicati	on No	om the
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give	IENT of this application. itted. Note the attached EX	AMINER'S AMENDMENT or NOTIC	
 CORRECTED DRAWINGS (as "replacement sheets") mus (a) ☐ including changes required by the Notice of Draftspers 	st be submitted.		
	•	W (110 540) attached	
(b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the	s Amendment / Comment o	the drawings in the front (not the back)) of
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MAT	ERIAL must be submitted. Note the	he
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview S Paper No 7. ☐ Examiner's —	nformal Patent Application Summary (PTO-413), ./Mail Date s Amendment/Comment s Statement of Reasons for Allowanc 	e

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: the prior art does not teach a pharmaceutical composition or a steroid compound of formula I as instantly claimed.

The closest prior art is Lobaccaro et al. and Napolitano (both of record).

Lobaccaro et al. teaches steroid compounds similar to those of formula 1 except that R11 is butene or ethene and that these compounds are active at the estrogen receptor. Likewise, Napolitano teaches compounds in which R11 is propynl or ethane groups. However neither reference teaches the estrogenic compound having the group R11 that is pentene, pentane, pentyl, or a butane group substituted with a cyclopropyl group.

Applicants provided a Declaration on 8/7/2008 showing the unexpected results that the compound of presently claimed formula I containing a five-carbon chain at the 11β position posseses properties that are different than homologs at the four-carbon chain at the 11β position. The presently claimed compounds were shown to have both agonist activity at ER α and antagonist activity at ER β , whereas the homologs possess agonist activity at both ER α and ER β .

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 09/831,954 Page 3

Art Unit: 1617

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Renee Claytor whose telephone number is (571)272-8394. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Renee Claytor

/SREENI PADMANABHAN/ Supervisory Patent Examiner, Art Unit 1617